*h*ABCG2 VersaClone cDNA

Catalog Number: RDC0097

Specifications:

Gene:	*h*ABCG2
Accession:	AAD09188
Insert size:	1985bp
Concentration:	10µg at 0.2µg/µL

Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

Preparation and Storage

Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

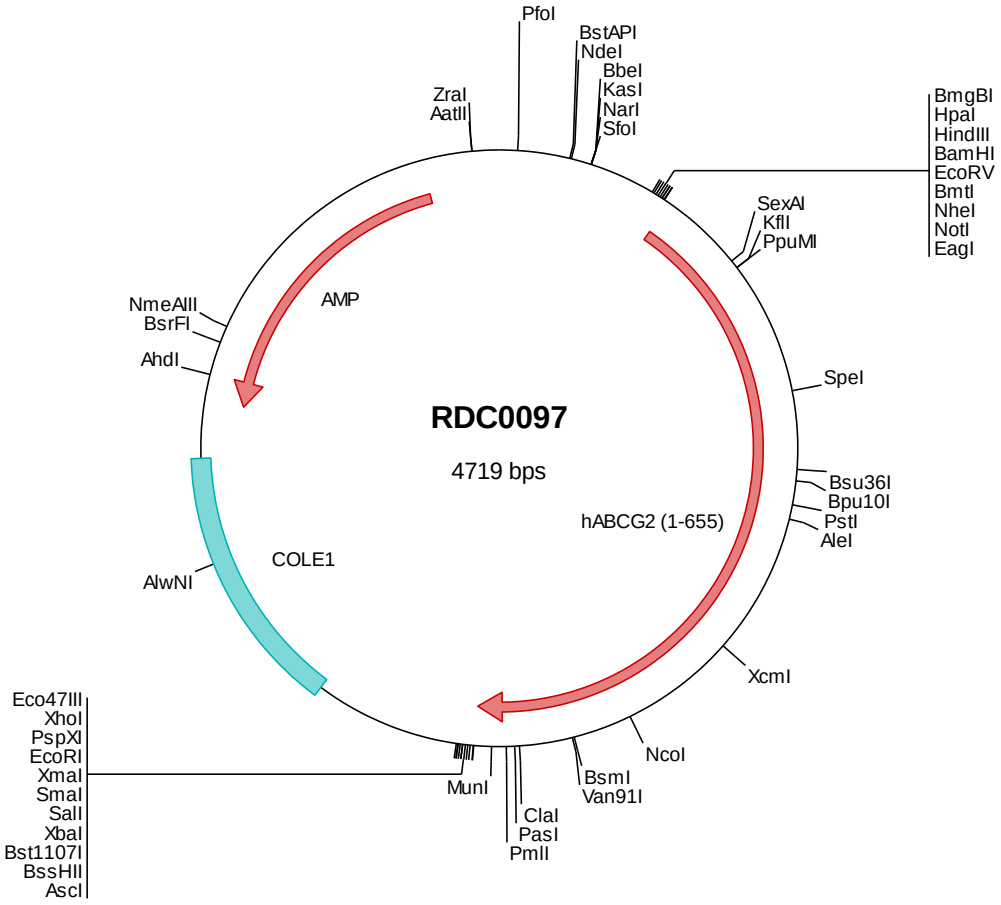
*h*ABCG2 cDNA Plasmid

ABCG2 ATP-binding cassette, sub-family G (WHITE), member 2 [*Homo sapiens*]

Also known as: MRX; MXR; ABCP; BCRP; BMDP; MXR1; ABC15; BCRP1; CD338; CDw338; EST157481

Summary:

Bcrp1 (Breast cancer resistance protein 1) or ABCG2 (ATP-binding cassette gene 2), first identified in a breast cancer cell line, is expressed on stem cells. ABCG2 belongs to a family of molecules that span the cell membrane six times and can exist as either homo or heterodimers linked by a short intracellular flexible linker region that plays an important role in the efflux of a wide range of substrates. ABCG2 is thought to play a role in drug resistance. The expression of ABCG2 appears greatest on $CD34^-$ cells and is down regulated with the acquisition of CD34 on the cell surface.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

> RDC0097 Plasmid DNA Sequence

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 101  tcagggcgcg tcagcgggtg ttggcgggtg tcggggctgg cttaactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
 201  ccgcacagat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aagggcgatc ggtgcgggcc tcttcgctat
 301  tacgccagct ggcgaaaggg ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt aaaacgacgg ccagtgaatt
 401  ggagacgtgt taacaagctt ggatccgata tcgctagcgc ggccgctggc caccatgtct tccagtaatg tcgaagtttt tatcccagtg tcacaaggaa
 501  acaccaatgg cttccccgcg acagtttcca atgacctgaa ggcatttact gaaggagctg tgttaagttt tcataacatc tgctatcgag taaaactgaa
 601  gagtggcttt ctaccttgtc gaaaaccagt tgagaaagaa atattatcga atatcaatgg gatcatgaaa cctggtctca acgccatcct gggacccaca
 701  ggtggaggca aatcttcgtt attagatgtc ttagctgcaa ggaaagatcc aagtggatta tctggagatg ttctgataaa tggagcacca cgacctgcca
 801  atttcaaatg taattcaggt tacgtggtac aagatgatgt tgtgatgggc actctgacgg tgagagaaaa cttacagttc tcagcagctc ttcggcttgc
 901  aacaactatg acgaatcatg aaaaaaacga acggattaac agggtcattg aagagttagg tctggataaa gtggcagact ccaaggttgg aactcagttt
1001  atccgtggtg tgtctggagg agaaagaaaa aggactagta taggaatgga gcttatcact gatccttcaa tcttgtcctt ggatgagcct acaactggct
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1201  cttcaagttg tttgatagcc tcaccttatt ggcctcagga agacttatgt tccacgggcc tgctcaggag gccttgggat actttgaatc agctggttat
1301  cactgtgagg cctataataa ccctgcagac ttcttcttgg acatcattaa tggagattcc actgctgtgg cattaaacag agaagaagac tttaaagcca
1401  cagagatcat agagccttcc aagcaggata agccactcat agaaaaatta gcggagattt atgtcaactc ctccttctac aaagagacaa aagctgaatt
1501  acatcaactt tccgggggtg agaagaagaa gaagatcaca gtcttcaagg agatcagcta caccacctcc ttctgtcatc aactcagatg ggtttctaag
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1801  ggtagagaag aagctcttca tacatgaata catcagcgga tactacagag tgtcatctta tttccttgga aaactgttat ctgatttatt acccatgagg
1901  atgttaccaa gtattatatt tacctgtata gtgtacttca tgttaggatt gaagccaaag gcagatgcct tcttcgttat gatgtttacc cttatgatgg
2001  tggcttattc agccagttcc atggcactgg ccatagcagc aggtcagagt gtggtttctg tagcaacact tctcatgacc atctgttttg tgtttatgat
2101  gatttttttca ggtctgttgg tcaatctcac aaccattgca tcttggctgt catggcttca gtacttcagc attccacgat atggatttac ggctttgcag
2201  cataatgaat ttttgggaca aaacttctgc ccaggactca atgcaacagg aaacaatcct tgtaactatg caacatgtac tggcgaagaa tatttggtaa
2301  agcagggcat cgatctctca ccctggggct tgtggaagaa tcacgtggcc ttggcttgta tgattgttat tttcctcaca attgcctacc tgaaattgtt
2401  atttcttaaa aaatatagct aaaggcgcgc cagtatactc tagagtcgac acccggggaa ttcctcgagc gctcgtctct agcttggcgt aatcatggtc
2501  atagctgttt cctgtgtgaa attgttatcc gctcacaatt ccacacaaca tacgagccgg aagcataaag tgtaaagcct ggggtgccta atgagtgagc
2601  taactcacat taattgcgtt gcgctcactg cccgctttcc agtcgggaaa cctgtcgtgc cagctgcatt aatgaatcgg ccaacgcgcg gggagaggcg
2701  gtttgcgtat tgggcgctct tccgcttcct cgctcactga ctcgctgcgc tcggtcgttc ggctgcggcg agcggtatca gctcactcaa aggcggtaat
2801  acggttatcc acagaatcag gggataacgc aggaaagaac atgtgagcaa aaggccagca aaaggccagg aaccgtaaaa aggccgcgtt gctggcgttt
2901  ttccataggc tccgcccccc tgacgagcat cacaaaaatc gacgctcaag tcagaggtgg cgaaacccga caggactata aagataccag gcgtttcccc
3001  ctggaagctc cctcgtgcgc tctcctgttc cgaccctgcc gcttaccgga tacctgtccg cctttctccc ttcgggaagc gtggcgcttt ctcatagctc
3101  acgctgtagg tatctcagtt cggtgtaggt cgttcgctcc aagctgggct gtgtgcacga acccccgtt cagcccgacc gctgcgcctt atccggtaac
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3501  atcttttcta cggggtctga cgctcagtgg aacgaaaact cacgttaagg gattttggtc atgagattat caaaaaggat cttcacctag atccttttaa
3601  attaaaaatg aagttttaaa tcaatctaaa gtatatatga gtaaacttgg tctgacagtt accaatgctt aatcagtgag gcacctatct cagcgatctg
3701  tctatttcgt tcatccatag ttgcctgact ccccgtcgtg tagataacta cgatacggga gggcttacca tctggcccca gtgctgcaat gataccgcga
3801  gacccacgct caccggctcc agatttatca gcaataaacc agccagccgg aagggccgag cgcagaagtg gtcctgcaac tttatccgcc tccatccagt
3901  ctattaattg ttgccgggaa gctagagtaa gtagttcgcc agttaatagt ttgcgcaacg ttgttgccat tgctacaggc atcgtggtgt cacgctcgtc
4001  gtttggtatg gcttcattca gctccggttc ccaacgatca aggcgagtta catgatcccc catgttgtgc aaaaaagcgg ttagctcctt cggtcctccg
4101  atcgttgtca gaagtaagtt ggccgcagtg ttatcactca tggttatggc agcactgcat aattctctta ctgtcatgcc atccgtaaga tgcttttctg
4201  tgactggtga gtactcaacc aagtcattct gagaatagtg tatgcggcga ccgagttgct cttgcccggc gtcaatacgg gataataccg cgccacatag
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4501  ggaaatgttg aatactcata ctcttccttt ttcaatatta ttgaagcatt tatcagggtt attgtctcat gagcggatac atatttgaat gtatttagaa
4601  aaataaacaa atagggggttc cgcgcacatt tccccgaaaa gtgccacctg acgtctaaga aaccattatt atcatgacat taacctataa aaataggcgt
4701  atcacgaggc cctttcgtc
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> RDC0097 Translated Insert Sequence

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 201  itdpsilsld epttgldsst anavllllkr mskqgrtiif sihqprysif klfdsltlla sgrlmfhgpa qealgyfesa gyhceaynnp adffldiing
 301  dstavalnre edfkateiie pskqdkplie klaeiyvnss fyketkaelh qlsggekkkk itvfkeisyt tsfchqlrwv skrsfknllg npqasiaqii
 401  vtvvlglvig aiyfglknds tgiqnragvl fflttnqcfs svsavelfvv ekklfiheyi sgyyrvssyf lgkllsdllp mrmlpsiift civyfmlglk
 501  pkadaffvmm ftlmmvaysa ssmalaiaag qsvvsvatll mticfvfmmi fsgllvnltt iaswlswlqy fsiprygfta lqhneflgqn fcpglnatgn
 601  npcnyatctg eeylvkqgid lspwglwknh valacmivif ltiaylkllf lkkys
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